Lobachevskii Journal of Mathematics 2017 vol.38 N3, pages 466-468

A note on an area-type functional of Bloch functions

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Abstract

© 2017, Pleiades Publishing, Ltd.Let D be the unit disk centered at the origin in the complex plane. In this paper we consider an extremal problem for an area-type functional in the space B of Bloch functions with the seminorm ||b||B = sup{(1 − |z|2)|b′(z)|: z ∈ D}. We show that sup{Σk=1n k|bk|2: ||b||B ≤ 1} = nBn2, n = 1, 2, 3, 4, 5, where bk are the Taylor coefficients of b and Bn = sup{|bn|: ||b||B ≤ 1}.

http://dx.doi.org/10.1134/S1995080217030155

Keywords

area’s functional, Bloch space

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